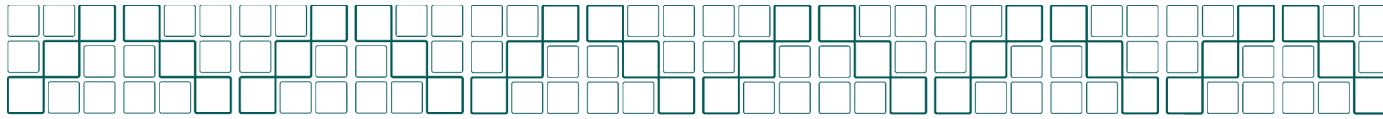


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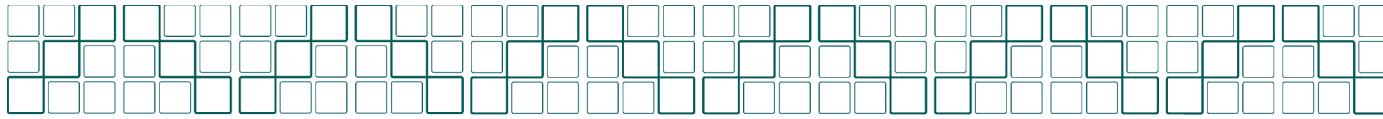
# Getting The Most Out Of Your Graduate Career

William J. Higgins



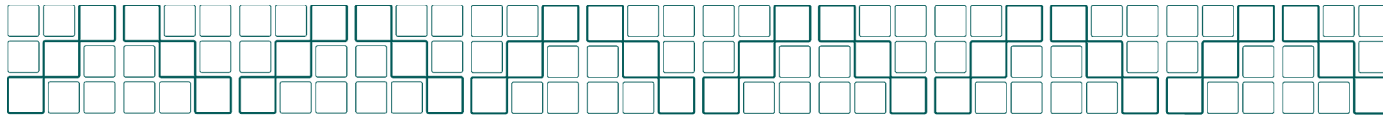
# Why are you here instead of the laboratory?

What is it you want to take away from this?



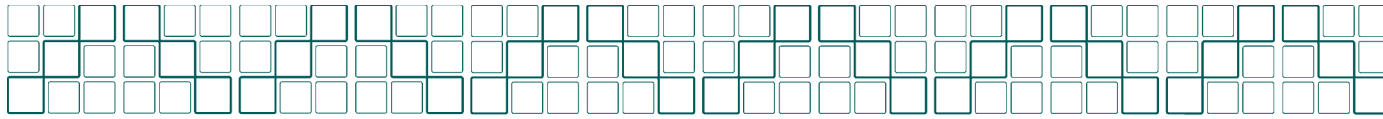
What is your reason for going to  
graduate school?

What do you see as the desirable  
ultimate outcome?

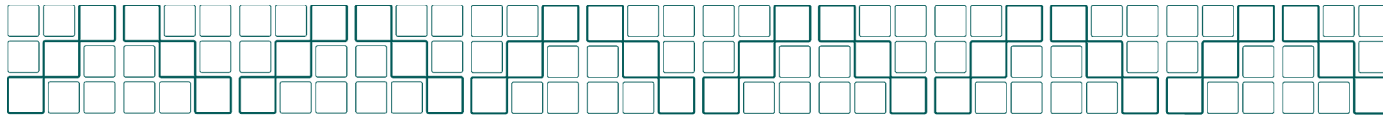


# Key Concept:

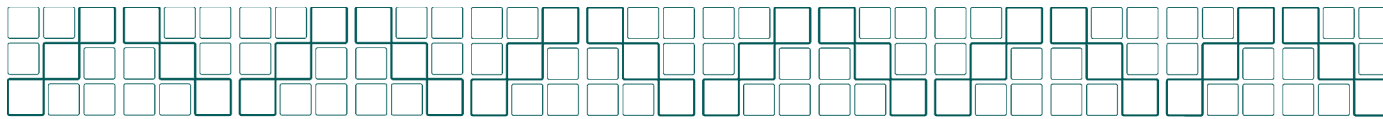
Becoming an independent  
investigator



Let's think about your move to  
the next stop on life's  
journey.....

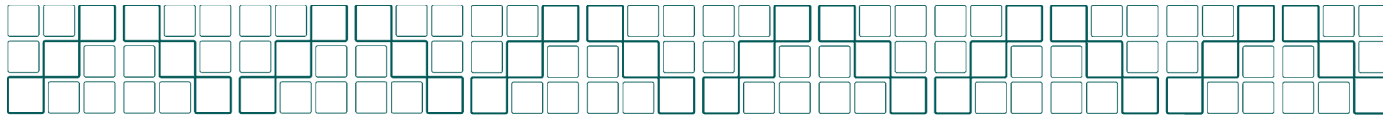


Whatever you think will be next, it  
will require an application.



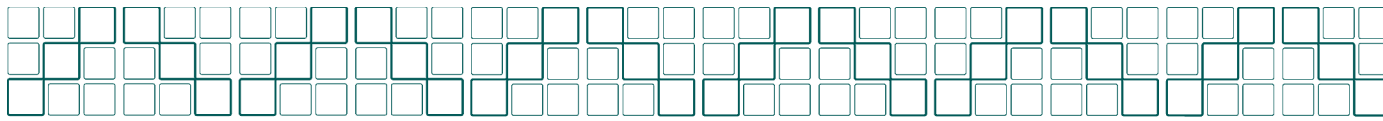
# What supports your application?

- Academic Excellence
- References
- Communication Skills
- Appropriate for position?
- Training
  - Technical
  - Professional
- Application materials
- Publications & Presentations
  - Impact factor
- Evidence of Grantsmanship
- Relevant Experiences
  - Research
  - Teaching
  - Business
- Reputation & Professional “Bloodlines”



Don't let the  
situation confuse  
you...



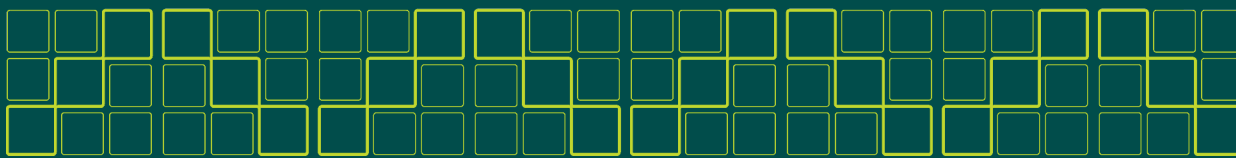


# A few skills to develop

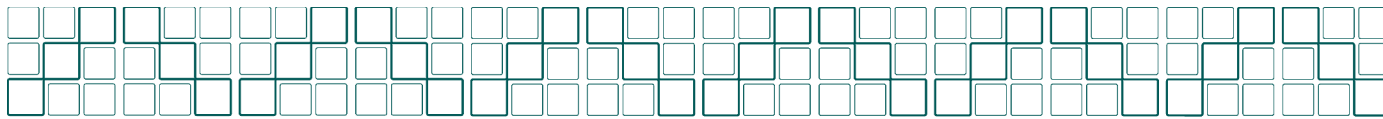
- Writing
- Speaking
- Presenting
- Time management
- Marketing
- Networking
- Dealing with your mentor and committee

---

Important message: **how  
well you say it is as  
important as what you say!**



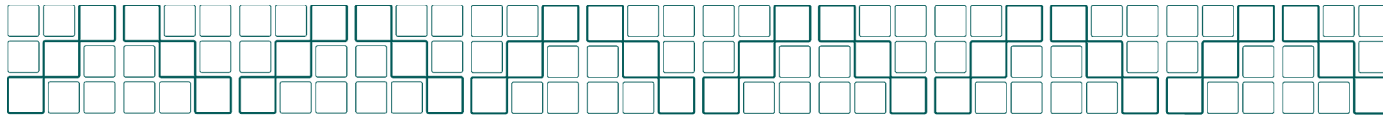
NATIONAL INSTITUTES OF HEALTH



“Bad writing makes you look stupid.

Good writing covers a multitude of shortcomings.”

R. Compton, 2004

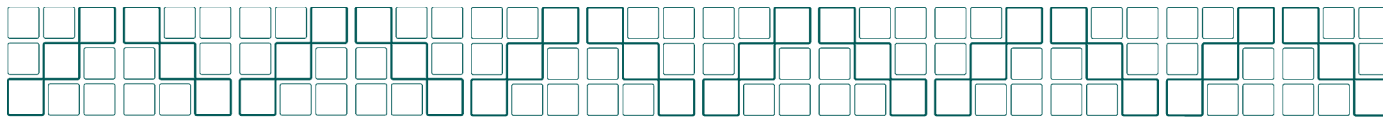


# *Step 1: the Resource*

Strunk & White

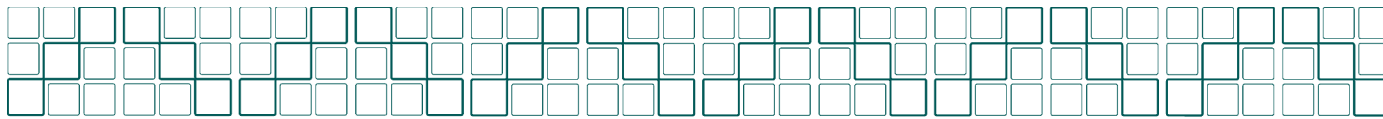
*The Elements  
of Style*





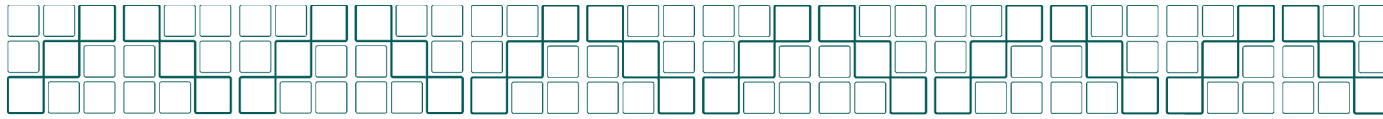
# Learn to write

- Use simple, declarative sentences
- Use active voice, definite verbs
- Write in the positive; rarely use the negative
- Omit needless words
- Eliminate one-half of your adjectives
- Punctuate correctly
- Transition between paragraphs



# Learn to edit your writing

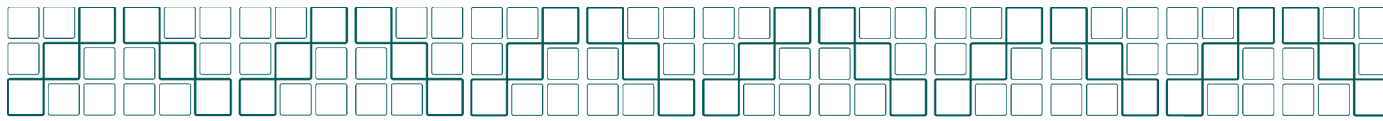
- Underline the subject and verb in each sentence
  - Is the verb definite and appropriate
- Outline the document when you have finished
  - Is it linear?
  - Is there a logical flow to the ideas?
- Read your final version aloud
  - Trust your ear
  - If you would not say it, do not write it!



# *Step 2: The Writing Process*

Once you have it down on paper,  
it is almost too late!

You may already be toast!

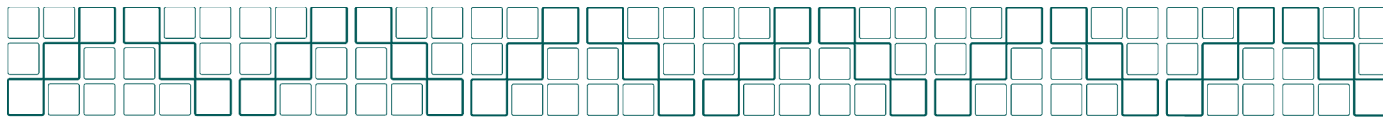


Chew gum and walk at the same  
time?

Type and think at the same time?

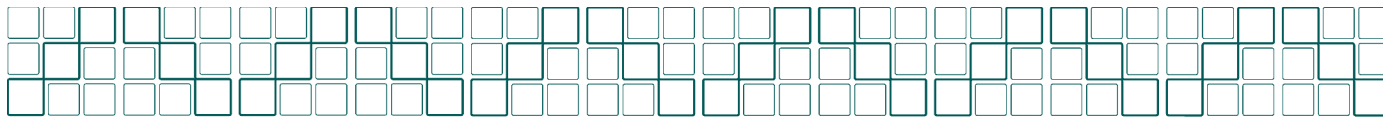
Do not sit at the keyboard  
and begin to think and type.





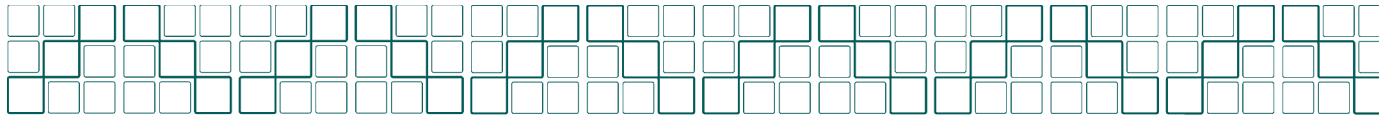
# Finding your time

- In advance of the deadline
  - You must avoid writing under stress.
- Each day as part of your routine
- Making notes
  - Not an outline!
- Use the Wall Method!
  - Do not use a written outline constructed in order in one sitting!



# You should have experience writing

- Abstracts
- Posters
- Presentations
- Dissertation
- Papers in refereed journals
- Proposals





# CATALOG of FEDERAL DOMESTIC ASSISTANCE



[Home](#) | [Programs](#) | [Agencies](#) | [Regional Agency Offices](#) | [General Info](#) | [Privacy](#)

### CFDA Statistics: Programs at a Glance

CFDA contains detailed program descriptions for **2,183** Federal assistance programs. The following chart shows the program distribution for the top five issuing agencies.



Agency	Program Count	Percentage
Department of Health and Human Services	429	35%
Department of the Interior	249	21%
Department of Agriculture	238	20%
Department of Education	171	14%
Department of Justice	125	10%

Last updated July 12, 2011

#### About CFDA

Catalog of Federal Domestic Assistance (CFDA) provides a full listing of all Federal programs available to State and local governments (including the District of Columbia); federally-recognized Indian tribal governments; Territories (and possessions) of the United States; domestic public, quasi- public, and private profit and nonprofit organizations and institutions; specialized groups; and individuals.

### Find Programs



Search now! You do not need an account to search the catalog and view Federal assistance programs.

Keyword or Program Number

Select Assistance Type...

- [Advanced Search Form](#)
- [Find Programs by Number](#)
- [Find Programs by Agency](#)
- [Added Programs \(since last publication date\)](#)
- [Archived Programs \(since last publication date\)](#)

 [Download CFDA 2010 Print Edition](#)

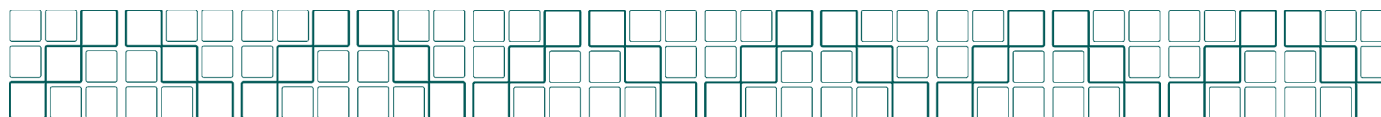


## RECOVERY

[SEARCH RECOVERY PROGRAMS](#)

Agency Log-In

<https://www.cfda.gov>





# CATALOG of FEDERAL DOMESTIC ASSISTANCE



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## General Info

[RETURN TO HOME](#)

- [CFDA Overview](#)
- [Writing Grants](#)
- [Types of Assistance](#)
- [Electronic Download](#)
- [Management Responsibility](#)
- [Frequently Asked Questions](#)

### Writing Grants

- [PART ONE: DEVELOPING A GRANT PROPOSAL](#)
- [PART TWO: WRITING THE GRANT PROPOSAL](#)

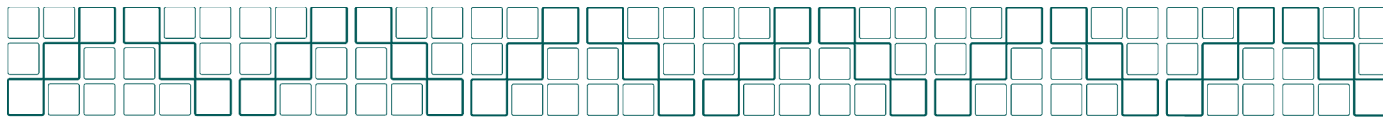
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#### PART ONE: DEVELOPING A GRANT PROPOSAL

##### Preparation

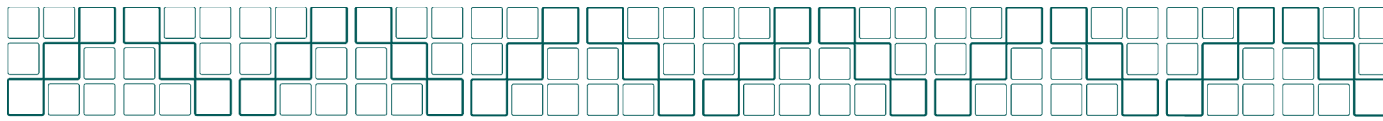
A successful grant proposal is one that is well-prepared, thoughtfully planned, and concisely packaged. The potential applicant should become familiar with all of the pertinent program criteria related to the Catalog program from which assistance is sought. Refer to the information contact person listed in the Catalog program description before developing a proposal to obtain information such as whether funding is available, when applicable deadlines occur, and the process used by the grantor agency for accepting applications. Applicants should remember that the basic requirements, application forms, information and procedures vary with the Federal agency making the grant award.

Individuals without prior grant proposal writing experience may find it useful to attend a grantsmanship workshop. A workshop can amplify the basic information presented here. Applicants interested in additional readings on grantsmanship and proposal development should consult the references listed at the end of this section and explore other library resources.



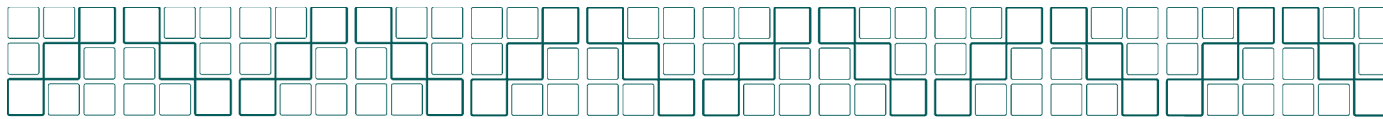
The **Absolute Best Way** of learning  
to write grants:

**serve on a review panel!**



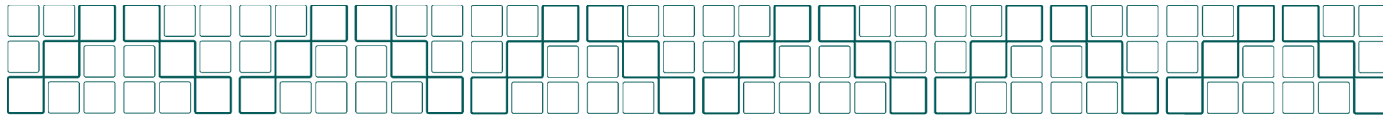
# Public speaking

- Requires practice
  - No, I mean *deliver it out loud* practice!
- Requires criticism; find a mentor and critic
- Video your performance
- Build your confidence
- Open doors with positive first impression
- Pay attention in seminars and lectures to technique and style



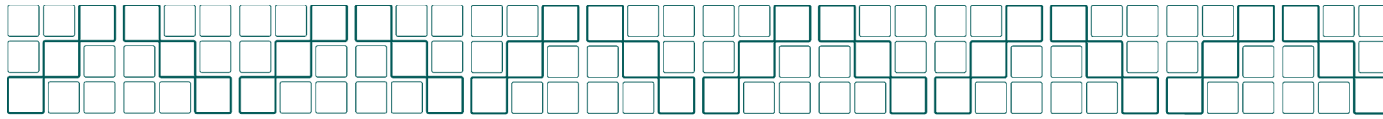
# Speaking skills requires practice

- Lab meetings
- Scientific meetings
  - Local, regional, national
- Guest lectures and seminars
- Community and schools

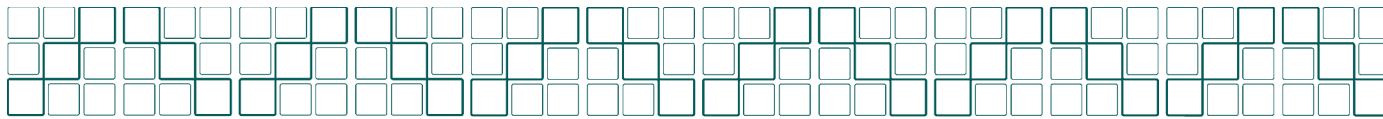


For the love of your fellow humans,  
please do learn how to make a  
Power Point slide!



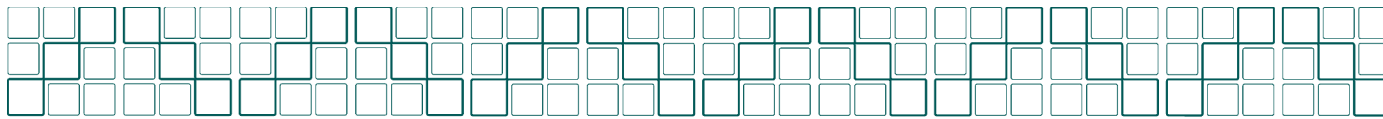


The focus of a presentation should  
be YOU not the slides!



# Power Points

- One large graph per slide
  - At an institute retreat, I saw 4 on a slide! They were so small the presenter had to walk to the screen
- Reasonable, readable color schemes
  - **Yellow on black is NOT acceptable**
  - In all but the biggest rooms, use dark lettering on light (white) background
  - Slide background should be minimal
  - Most animation effects are distracting

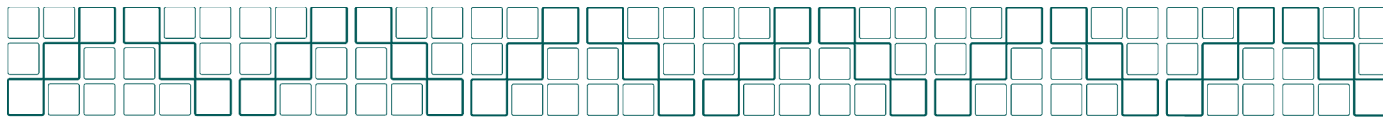


# Power Point is dangerous in the hands of amateurs

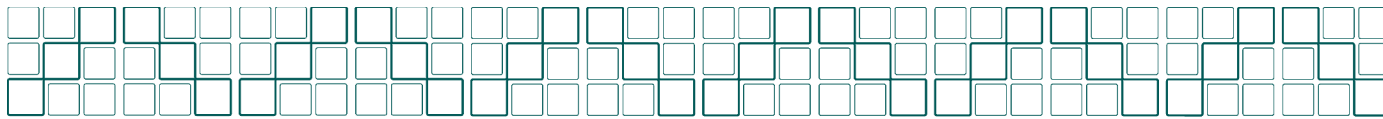
- Talk to the screen
- Audience forgets the speaker
- Encourages a lack of practice
- Discourages conversation
  - Presentation sounds memorized

*Practice without your slides or notes!*

Whatever you do, tell a story!

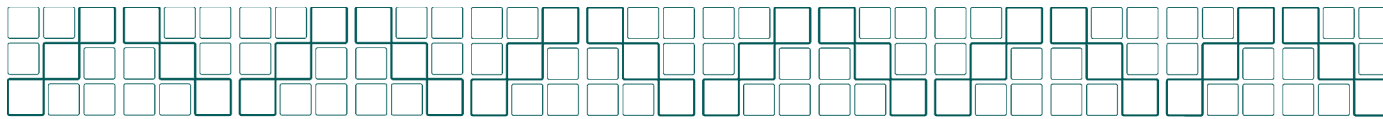


Develop and perfect the 60 second  
'elevator speech'



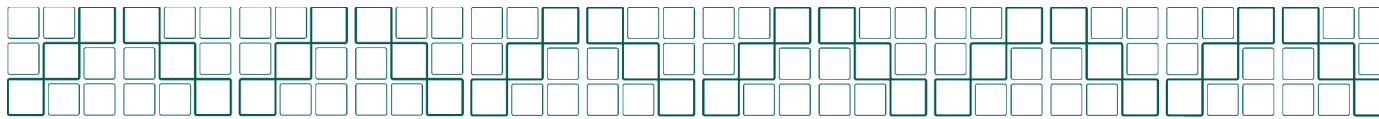
# Principles of Time Management

- One day at a time
- Lists of essential next day items only
- Use a day planner
- Time on task
- Not all times are good for certain tasks
- Location and the *right* time are critical
- You are not a '*night person*'
- Learn to sleep fast!



# Know your slice of the science

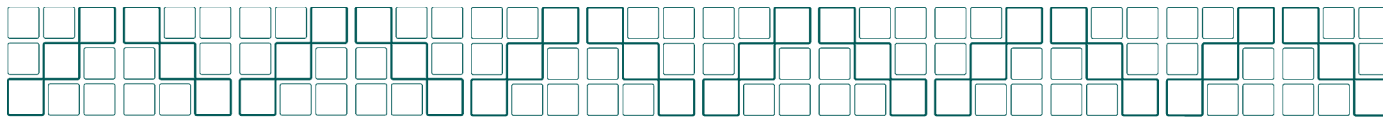
Keeping up with the literature requires a  
system



# Teaching Experience: The Portfolio

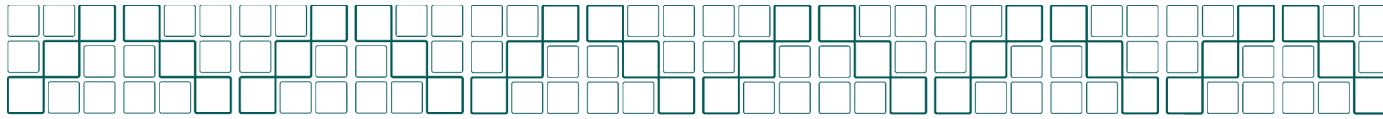
- Formal training
  - Campus teaching excellence program
- Student evaluations
- Peer and mentor evaluations
- Sample lectures and syllabus
- Video on the web
- Statement of Teaching Philosophy





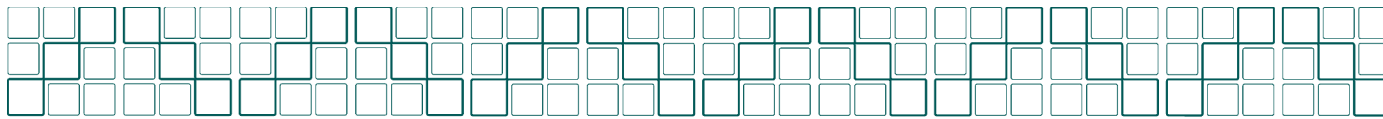
# Your Web Site

- Professional
- Informative
- Attractive
- Explains research interests and initiatives
- Pay attention to usage of key research terms that lead investigators to you



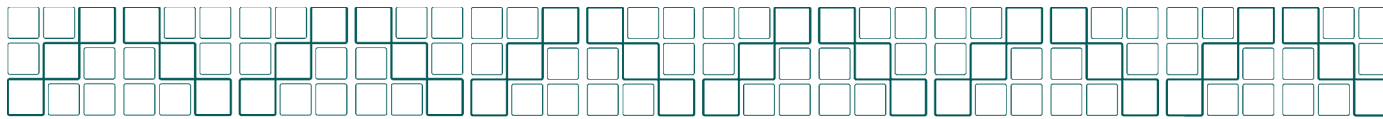
# Develop Your Network

- Your mentor
- Your *in house* colleagues
- Visiting seminar speakers
- Interest groups at meetings
- Social groups at meetings
- Colleagues via the literature



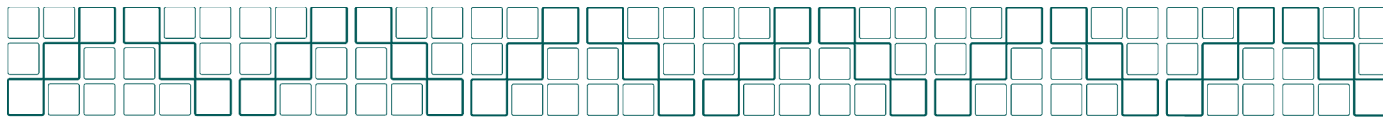
# Selecting a mentor

- Publications
  - Number
  - Impact
  - Recent
- Funding
  - Yours and theirs!
- Exciting
- Current lab personnel
- History of grad students
- Stage in career
- Opinions of current lab personnel



# Questions For Your Mentor

- My financial support plan?
- How and when do you communicate?
- What are the daily expectations placed on you?
- What are your responsibilities?
- What are her/his responsibilities?
- How do you select your dissertation project?
- How much direction and editing will you get on your written work and your oral presentations?
- How long should my graduate career last?
- What meetings do I get to attend?



# Your Dissertation Committee

- Are (or should be) on your side!
- Selected for their scientific expertise
- Should be familiar with graduate education
- Potential resources for technical advice
- Should be kept informed about your progress and problems
- If utilized properly will make your Ph.D. defense at routine affair

# Requesting Reference Letters

# When do you bail out?

If any of the following images look familiar, it might be time to move on!

# What else shall we discuss?



# Thank you

Do well and be happy!